Beauty, or not, in the classroom

UTAustin, like every other major university in the country, asks students to evaluate the quality of instruction they have received from their professors. In your career at UT, you will almost certainly have participated in this process, rating your professors on a scale of 1 (very unsatisfactory) to 5 (excellent). These ratings, in turn, are part of what administrators use to evaluate faculty performance, set salaries, make promotion decisions, and confer teaching awards.

You therefore have a non-trivial say in the future direction of the university. The file profs.csv contains data on course-instructor surveys from a sample of 463 courses at the University of Texas from 2000- 2002. You are also given information about the individual courses and professors – including, most controversially, a rating of each professors physical attractiveness as judged by students. The data represent evaluations from 25,547 students and most major academic departments.¹

The variables included are:

- minority: is the professor from a non-Caucasian ethnic minority?
- age: the professors age.
- gender: a factor indicating the professors gender. credits: a factor indicating whether the course is a single-credit elective (e.g. scuba diving or ballroom dancing, coded single) or an academic course (coded more).
- beauty: a rating of the professors physical attractiveness, as judged by a panel of six students. (The score was averaged across all six panelists, and shifted to have a mean of zero)
- eval: the professors average teaching evaluation for courses in the sample, on a scale of 1 to 5.
- division: whether the course is an upper or lower division course.
- native: whether the professor is a native English speaker.
- tenure: whether the professor is tenured/tenure-track, or not.
- students: the number of students that participated in the evaluation.
- allstudents: the number of students enrolled in the course.
- prof: a unique numerical identifier for the professor being rated.

The fundamental question for you to address is: does it seem that teachers who are perceived as more attractive receive higher course instructor evaluations, other relevant factors being equal?

¹Data from Beauty in the classroom: instructors pulchritude and putative pedagogical productivity. Daniel S. Hamermesh and Amy M. Parker. Economics of Education Review, August 2005, v. 24 (4) pp. 36976.

- 1. Start by examining the association between the evaluations and the beauty score. Does there appear to be a relationship between these two variables? Do you think this is a *causal* relationship? (Do better looking instructors get better course evaluations due to their looks?)
- 2. Revisit part 1, but control for gender. How do you interpret the coefficient on the beauty score? Do your conclusions change? How do you interpret the estimated coefficient on the gender variable in this model?
- 3. We've ignored many other relevant variables until now. Estimate the relationship between evaluations and the beauty score adjusting for an appropriate set of variables. (Hint: We should be *most* concerned about adjusting for confounders variables that are likely to be associated both with gender/the perception of beauty and students' course evaluations. Including variables that are uncorrelated with beauty scores but predictive of course evaluations can also be helpful.) Does there still appear to be a relationship between beauty and course evaluations, controlling for these other factors? How about gender? You can consider more than one model here.
- 4. Is the relationship between appearance and course evaluations different for men versus women, adjusting for other relevant factors?